systems.[53] These systems, as in Bell Atlantic, were tested to the extent that these systems were necessary for fully provisioning end-to-end orders.[54] Finally, CLEC commenters raise questions about the blindness associated with the Texas testing as well as the independence of Telcordia as the third party monitor. The Texas Commission notes that the tests were as blind as possible given order volumes over EDI at the time of testing.[55] The Texas Commission notes that carrier-to-carrier testing was monitored by a third party for the express purpose of developing a full and independent record.[56]

Commenters also include some specific allegations that the Texas Commission believes merit correction. These allegations include that SWBT was notified by Telcordia of the testing dates and that Telcordia's analysis ended when any part of the OSS process resulted in manual intervention.[57] The fact is that Telcordia did not inform SWBT of testing dates. Further, it monitored the SWBT Local Service Center (LSC) on days of activity and inactivity to review differences in process from testing to non-testing dates, and followed through on the evaluation of each order regardless of whether manual handling was involved.

The Texas Commission reiterates that its conclusions relating to SWBT's OSSs are based on the totality of the record before it that includes performance data, the work product of the collaborative sessions, as well as the 12-month testing process undertaken by Telcordia on behalf of the Texas Commission. Furthermore, where additional concerns were raised after the testing time period, the Texas Commission engaged in activity to scrutinize specific issues. This scrutiny included various efforts conducted by the Texas Commission, Telcordia and the joint efforts of CLECs and SWBT. This additional review included: Telcordia's review of the implementation of two software releases, Telcordia's review of SWBT documentation related to EDI/LSR development, and Telcordia's review of the implementation of additional performance measures. In addition, the Texas Commission, SWBT, and AT&T reconciled data on coordinated hot cut measures to determine the efficacy of previously validated performance measures. Finally the Texas Commission has diligently reviewed SWBT performance data on each of the 131 measures and expanded its review of any questionable measures. The two years involved in the collaborative process and in testing repeatedly demonstrated the fact that SWBT has corrected system defects, changed processes, and clarified documentation to better accommodate CLEC wholesale customers.[58]

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[53] *E.g.*, AT&T Comments at 74; MCI Worldcom Comments at 44.

[54] Final SWBT OSS Readiness Report at 18.

[55] The Texas Commission acknowledges that some AT&T test orders were marked with a unique AECN, but fails to see a distinction between this AECN and the necessary unique AECN for the pseudo-CLEC testing *in Bell Atlantic New York.*

[56] Indeed, CLECs participated in the choice of a third party consultant and recommended Telcordia's inclusion on a short list of qualified testers.

[57] CLEC Coalition comments at 16.

[58] *See* Final SWBT OSS Readiness Report at 4, Attach. A (note about continuous improvement and a listing of process, software and documentation changes resulting from the testing process.) Other process and systems changes are documented throughout the Texas Commission record.

3. Manual Handling

Many of the commenters assert that manual processing of orders is inherently problematic within the SWBT OSS and that it does not provide parity processing performance.[59] Although this was an area of concern that the Texas Commission and Telcordia shared, further staff investigation and additional evidence presented in October 20-21 and November 4, 1999 Open Meetings convinced the Texas Commission that this was not inherently problematic.

Because of the Texas Commission's concern that increasing the number of orders upward necessarily entails scaling of personnel to meet the needs of a commensurate increase in manual handling, the Texas Commission retained Telcordia to review SWBT's force modeling. SWBT maintains a force model tool that entails a number of proprietary inputs. Telcordia reviewed the force model to determine the adequacy of the inputs.[60] Telcordia also reviewed whether, at three different levels of SWBT manual handling rates, SWBT could reasonably expect to scale its employee pool to meet the demand. These three rates included low, medium and high rates of rejection/manual handling and the projected number of employees it would take to handle the increased load. Based on Telcordia's findings and the Open Meeting testimony of SWBT personnel, the Texas Commission determined that SWBT could adequately increase its workforce to handle the additional foreseen load resulting from increasing volumes of orders into the foreseeable future.[61]

4. Specific Issues

Commenters allege that SWBT has failed to provide parity integrated ordering and pre-ordering capability.[62] Though the Texas Commission has conducted limited functionality testing of the ability to integrate the pre-ordering interfaces,[63] it is the understanding of the Texas Commission that integrative functions have been accomplished by multiple CLECs. The failure to integrate these functions by any one individual CLEC is not evidence of a lack of parity processing capability, only the failure by that CLEC to develop that integration capability. At the time of the Final Staff Status Report on pre-ordering integration, SWBT had deployed Datagate, a proprietary system that can be fully integrated with EDI. The Texas Commission at that time determined that SWBT should not be held responsible for implementing the full integration requirements ahead of the adoption of national standards, and therefore concluded that the Datagate system integration capability satisfied the necessary standard. Indeed, the Texas Commission determined that SWBT should not be penalized for attempting to be ahead of national standards in providing functionality to CLECs. In addition, SWBT asserts it is currently

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[59] *E.g.* MCI Worldcom Comments at 20; AT&T Comments at 63; Sprint Comments at 15.

[60] Final SWBT OSS Readiness Report at 134. *See also* Transcript of November 4, 1999 Open Meeting, Evaluation of the Public Utility Commission of Texas, App., Tab C-3.

[61] *See* Transcript of November 4, 1999 Open Meeting, Evaluation of the Public Utility Commission of Texas, App., Tab C-3.

[62] AT&T Comments at 61; MCI Worldcom Comments at 6.

[63] Final SWBT OSS Readiness Report at 36.

engaged in CLEC testing to utilize EDI/CORBA – a national standard pre-order system with full integrative properties.

Various commenters also noted their inability to enter trouble reports as a result of SWBT's order posting process. In the instance where a service order is created but errors out prior to posting, a CLEC user is still unable to use trouble administration. SWBT issued an accessible letter in November to address this concern.[64] This accessible letter notified CLECs that they may contact the LOC to establish trouble tickets prior to order completion. Commenters noted that manual workarounds increase the need for personnel and utilize resources inefficiently. The functionality added by SWBT, which is detailed in its February 18, 2000 ex parte filing directly addresses this concern.[65] This filing indicates that SWBT has established a mechanized procedure to allow CLECs to enter trouble tickets prior to posting.[66] This mechanized process will alleviate the need for CLECs to call the LOC for manually processing of trouble tickets. In addition, SWBT has established process changes including additional training and job aides for its personnel as well as a weekly task force composed of SWBT and CLEC personnel to address any other potential problems relating to UNE-P conversion.[67]

Finally, the Texas Commission notes that various commenters objected to the SWBT system for relating purchase order numbers. The Texas Commission, therefore, reiterates its support for the solution proposed by SWBT in the November 3, 1999 Accessible letter.[68] This solution places the RPON issue in the queue for prioritization by all OSS users in the change management process and accounts for an interim solution.

[64] *Id.* at para. 225, referencing Attach. EE to Ham Aff.

[65] Letter from Austin C. Schlick to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 00-4, Attach. 6 (Feb. 18, 2000) (SWBT Feb. 18, *Ex Parte* Letter).

[66] *Id.*

[67] Conway Aff., App. A-4, Tab 3, para. 122.

[68] The letter reads, in part, "CLECs have requested to relate two LSRs – one for conversion of an UNE-Loop with Number Portability and one for a new UNE-Loop. If the CLEC desires a Desired Frame Due Time (DFDT) on the new UNE-loop, the Coordinated Hot Cut (CHC) field and the DFDT field must be populated. If the CLEC also desires the new UNE-Loop LSR to be related with the conversion LSR, the RPON field on both LSRs must also be populated. This resolution is available immediately and will also provide a permanent solution. If CLECs request additional requirements for the RPON field, these will be handled via the Change Management Process." Application of Southwestern Bell Telephone Company, App. G, Vol. 12, Tab 825.

5. OSS Performance Data Analysis

Regarding the flow through rates of UNE-L orders submitted via the EDI or LEX interfaces (PM-5), Justice estimates that over 50 percent are manually processed. The Texas Commission would note that the flow through rates appear to be increasing and are better than reported flow through rates for Bell-Atlantic.[69] Justice cited the fact that SWBT's performance for FOCs returned within 5 hours for UNE Loops via the EDI interface (PM-5.10) generally decreased October through December as the volumes increased. The Texas Commission does not believe that a downward performance trend is apparent since SWBT's performance improved from 88.1 percent in October to 92.7 percent in November. In addition, SWBT met the 95 percent benchmark for this measure July, August, and September with 96.6 percent, 99.4 percent, and 96.3 percent performance respectively. Most importantly, SWBT's performance improved to 96.2 percent in January while the volume of orders increased by approximately 15 percent. Based on these results which show no systemic problem in FOC returns, the Texas Commission believes that SWBT's performance is nondiscriminatory and provides CLECs with a meaningful opportunity to compete.

Data underlying PM-94.9, the percent of FOCs received within five hours for Residential and Business Lines (1-19 loops with LNP) for EDI, show non-compliance September through December. The relative performance improved in December (77.7 percent), while the volume increased by 48 percent. January results show 92.9 percent on time, a dramatic improvement, even though volumes increased from 378 in November to 492 in January. In addition, although Justice reported that SWBT's FOC returns via LEX (PM-5) "bounced around," SWBT in fact provided compliant performance in September (94.1 percent), November (94.2 percent), and December (97.5 percent), with a minor miss in October (90 percent).[70]

PM-10.1 captures the performance related to reject notices sent manually for electronically received orders. The Texas Commission approved benchmark for this measure is 97% within 5 hours. SWBT has not met the benchmark for the last six months. This measurement, however, needs to be viewed in conjunction with the performance data for the order process flow through rate of electronic orders (PM 13) that flow through both EDI and LEX.

The data for PM-13, as shown below in Figure 1, when combined for both EDI and LEX shows that the flow through rates for EDI and LEX are consistently above SWBT's retail experience for the months of August through December.[71] In addition, during the months of August through December, the flow through rate is above 93 percent; approximately 7 percent of the orders that fall through require manual operation either for FOC or Reject notice. As more

[69] *See Application of Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, CC Docket No. 99-295, Department of Justice Evaluation at 17. (In August, more than 83 percent of unbundled loop orders required manual processing....)

[70] Department of Justice Evaluation at 39, n. 106.

[71] SWBT is relying upon EDI for its showing of compliance with Section 271. LEX data is combined with EDI for this analysis only to demonstrate a more complete picture of SWBT's overall performance.

types of orders become electronically editable and are able to be processed by SWBT's Mechanized Order Generator (MOG), the reliance on manual processing will decrease. In addition, the data in PM-11.1 shows that the average time to return the manual rejects during the months of July through December was 14.75 hours; this is better than the manual FOC return benchmark of 24 hours. Overall in this area, SWBT's performance has been better than Bell Atlantic's. Bell Atlantic's average time to return manually processed rejects was 31.1 hours in June, 24.3 hours in July, 17.4 hours in August, and 14.24 hours in September.[72] SWBT's performance has been significantly lower than Bell Atlantic's, with the exception of December, which the Texas Commission concludes is more an anomaly than trend.[73] The Texas Commission also notes that the escalating damage amount starting from $25 per occurrence to $400 payable to each CLEC provides an incentive for SWBT to minimize the number of orders returned manually as well as decrease the response time. In view of this analysis, the Texas Commission believes that SWBT's performance is nondiscriminatory and provides CLECs a meaningful opportunity to compete.

Figure 1: PM-13, *Percent Order Flow Through*

# LEX Orders	17764	15170	15043	23368	26181	25707
LEX Flow Through Rate	76.90%	82.70%	87.60%	87.50%	88%	88.30%
# EDI Orders	14715	41877	115255	47205	42859	52644
EDI Flow Through Rate	85.70%	97.50%	99.10%	97.60%	96.30%	98.20%
Combined Electronic Orders	32479	57047	130298	70573	69040	78351
Combined Flow Through	80.89%	93.56%	97.77%	94.26%	93.15%	94.95%
SWBT Retail	91.90%	91.30%	91.30%	91%	91.30%	92%

PM-10, *Percent Mechanized Returned within One Hour of Receipt of reject in LSR*, performance data shows that SWBT delivered better than parity performance for both LEX and EDI orders during the months of July through December.

PM-11, *Mean Time to Return Mechanized Rejects*, performance data shows that during the twelve month period ending December 1999, there were 0.29 and 0.24 hours for LEX and EDI respectively. This diagnostic measure indicates that the average time was well below one-hour.

The post-provisioning order process for LEX under PM-7.1 has shown a steady increase upward from August through December. The orders completed within one day have steadily improved while the volume of completions has continued to rise. Coupled with the fact that the

[72] Department of Justice Evaluation at 40, n. 111.

[73] SWBT's mean time to return jumped to 35.65 hours in December from 14.94 hours in November on similar volumes.

Service Order Completion (SOC) return performance via EDI has been exceptional for the same time period, the Texas Commission believes that problems are not systemic and will continue to improve. Additionally, the data in Figure 2 below shows that in September SWBT delivered compliant performance, while the combined number of completions for EDI and LEX was at the highest of the 5-month period. In December, SWBT's performance was in compliance as the number of completions increased from November. In view of the fact that SWBT is offering EDI at no monthly fee as part of the merger agreement and that the industry standards are evolving around EDI, the Texas Commission believes that increasing quantities of orders will be processed through EDI. With this analysis, the Texas Commission finds that CLECs have a reasonable opportunity to compete in SWBT service areas in Texas.

Figure 2: PM-7.1, *Mechanized Completions Available Within One Day of Work Completion*

# Completions EDI Orders	11599	32451	19442	12885	18833
% Return within 1 Day-EDI	98.40%	98.40%	96.50%	96.80%	97.10%
# Completions LEX Orders	9007	8709	9495	11115	10927
% Return within 1 Day-LEX	76.70%	77.20%	86.10%	84.80%	87.50%
# Completions LEX and EDI Orders	20606	41160	28937	24000	29760
% Return within 1 Day-LEX and EDI	88.91%	93.91%	93.09%	91.24%	93.58%
Benchmark	97%	97%	97%	97%	97%
Z - value for Combined LEX and EDI	6.39	1.39	2.21	4.06	1.72

F. Miscellaneous Additional Issues

1. SB 560 and Texas Commission regulatory authority

ALTS complains that the Texas Commission has limited regulatory authority over SWBT because of legislation enacted by the Texas Legislature in 1999. ALTS, therefore, asserts that the Commission cannot rely on Texas Commission oversight "to ensure that an open market will be maintained in Texas."[74]

In 1995, SWBT elected to be regulated pursuant to Subtitle H of the Public Utility Regulatory Act (PURA95). The Texas Legislature enacted Subtitle H, entitled *Incentive Regulation of Telecommunications*, in part to "provide a framework for an orderly transition from traditional return on invested capital regulation to a fully competitive telecommunications marketplace where all telecommunications providers compete on fair terms."[75] Section 3.351(1) of PURA95 allowed an incumbent local exchange company (ILEC) to elect to be regulated under incentive regulation in exchange for the company's commitment "to limit any increase in the rates charged for a four-year period for the services included in Section 3.353 of this Act and its infrastructure commitment as described by Section 3.358 of this Act."[76] Subtitle H of PURA95 established the parameters an electing company must follow when applying to change the rate of a service offered by the company. Subtitle H offers an electing company lessened rate regulation and more pricing flexibility in return for certain infrastructure commitments and restrictions on rate increases for four years following the Subtitle H election. In 1997, the Texas Legislature codified PURA, and Subtitle H companies became Chapter 58 companies. In 1999, the Texas Legislature enacted SB 560 and amended the process by which Chapter 58 companies like SWBT change the rate of services or offer new services.

SB 560 does not limit the Texas Commission's authority or any competitor's ability to challenge rate changes or service offerings by SWBT. SB 560 merely adopts a more aggressive timeframe, allowing an offering to go into the market after a 10 day notice to the Texas Commission and to all companies that have an effective interconnection agreement with SWBT. The Texas Commission believes that this procedural change is consistent with a more competitive marketplace. The Texas Commission Staff has accelerated its review of such offerings in order to reflect this change. The standard of review for such offerings is sufficiently broad: "a discount or any other form of pricing flexibility may not be preferential, prejudicial, discriminatory, predatory or anticompetitive."[77] Customer-specific contracts are not allowed, except under certain circumstances.

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[74] The Texas Commission notes that ALTS acknowledges, by its use of the word "maintain," that the market is in fact open to competition.

[75] By enacting Subtitle H, the legislature also sought to preserve and enhance universal telecommunications service at affordable rates; upgrade the telecommunications infrastructure of this state; promote network interconnectivity; and promote diversity in the supply of telecommunications services and innovative products and services throughout the entire state, both urban and rural.

[76] Public Utility Regulatory Act, TEX. UTIL. CODE ANN. § 3.352(a) (Vernon 1998 & Supp. 2000) (PURA).

[77] PURA §51.004(a).

AT&T complained in its comments about a service proposed by SWBT in an informational notice filing. On September 1, 1999, SWBT filed an informational notice filing proposing to introduce two switched access optional payment plans (OPPs). On September 10, 1999, AT&T filed a complaint concerning the plans alleging that the plans discriminate against large interexchange carriers and in favor of new entrants such as SWBT's long distance affiliate.[78] A hearing was held and the Administrative Law Judge recommended that the Texas Commission reject both OPP1 and OPP2 because they were discriminatory and anticompetitive. The Texas Commission agreed with the Administrative Law Judge and rejected SWBT's filings. Instead of illustrating a problem, the Texas Commission believes that the way this docket was processed shows that the Texas Commission does indeed still have the power to reject new services or rate changes that are anticompetitive or discriminatory.

2. Reciprocal Compensation

In response to SWBT's application commenters e.spire and the CLEC Coalition commented on issues relating to reciprocal compensation. Both commenters argue that SWBT underpays the CLECs due to unreliable or incorrect usage data for traffic between networks.[79] The CLEC Coalition specifically points to the exchange of Type-92 Summary records as the source of the discrepancies.

The T2A presents three options for a CLEC with regard to records exchange for reciprocal compensation: Option 1: AT&T Contract Option; Option 2: Long-Term Bill and Keep Option; and Option 3 Negotiate/Arbitrate Option.[80] Only if a CLEC chooses Option 2 does the T2A dictate that the companies exchange Type-92 originating records.[81] In recognition of the CLECs opposition to the use of Type-92 records exchange, the Texas Commission specifically included Options 1 and 3 which outline the default method, in the event no other agreement can be reached, as reporting the Percent Local Usage (PLU).[82] The T2A also states that both the 92-type records and the PLU methods are to be in place until the Commission or the Texas Commission requires an alternate method.[83]

To reconcile issues relating to records exchange for reciprocal compensation for UNEs and ported numbers, in 1999 the Texas Commission initiated a permanent rulemaking proceeding.[84] Based on comments received after conducting two workshops, the project was

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[78] *Complaint by AT&T Communications of the Southwest, Inc. Regarding Tariff Control Number 21302 – Switched Access Optional Payment Plan (OPP)*; SOAH Docket No. 473-99-1963; PUCT Docket No. 21392.

[79] e.spire Comments at 6; CLEC Coalition Comments, Attach. 7, paras. 45-46.

[80] T2A Attach. 12, Compensation, Secs. 1.2.1, 1.2.2, 1.2.3.

[81] *Id.* at Sec. 7.7.2.

[82] *Id.* at Sec. 7.1.

[83] *Id.* at Sec. 7.1, 7.6.

[84] Project No. 20537: *Rulemaking Seeking a Permanent Solution for Exchange of Billing Records between ILECs and CLECs for Calls Involving the Use of Unbundled Network Elements or Ported Numbers. See also* Letter from SWBT re: Agreements Setting Out Interim Solutions for Calculation of Compensation for Third Party Messages,

temporarily suspended in favor of allowing carriers to explore a national solution at the OBF. There has been progress at the OBF, and a draft proposal is expected to be presented at the May meeting. In the meantime, the interim record exchange methods included in the T2A are applicable.

3. Extended Area Service (EAS)

In its comments, MCI Worldcom argues that the Extended Area Service (EAS) additive charge is a special charge for SWBT that allows SWBT compensation for revenues lost to CLECs.[85] MCI Worldcom accurately explains the special circumstances surrounding the optional EAS retail service—for a flat monthly rate, an EAS subscriber is allowed to make and receive calls to or from anyone in its extended calling area toll free.

The per minute EAS additives were established by the Texas Commission in the Mega-Arbitration and apply in an optional two-way EAS arrangement between CLECs and SWBT.[86] These additives apply in addition to cost-based transport and termination rates for Optional EAS arrangements and also apply if a CLEC chooses to adopt the transport and termination rates in effect between SWBT and other ILECs for optional EAS traffic. These additives were established to enable CLECs to enter into optional two-way arrangements with SWBT similar to the arrangements in place between SWBT and ILECs. The intent is to compensate a CLEC or SWBT for toll charges that these carriers are otherwise entitled to assess on their own customers but have agreed to waive when their customers place calls to an optional two-way EAS customer of another carrier (SWBT or CLEC).

In support of its argument that the additive charges place the CLECs at a competitive disadvantage, MCI Worldcom quotes the language of a Mega-Arbitration Award.[87] However, MCI Worldcom neglects to mention that these additives are reciprocal. The applicable portion of the Award states,

> These additives are reciprocal in nature, and an LSP like AT&T or MCI is entitled to receive compensation from SWBT if the LSP agrees to waive charges for its customers who call SWBT optional two-way EAS customers. These additives also apply if a LSP chooses to adopt the transport and termination rates in effect between SWBT and other ILECs for optional EAS traffic.[88]

Application of Southwestern Bell Telephone Company, App. C, Vol. 139, Tab. 1995 (attaching documents outlining agreements between SWBT and AT&T, MCI Worldcom and Sage Telecom).

[85] MCI Worldcom Comments at 49.

[86] Application of Southwestern Bell Telephone Company, App. F, Tab 17, Arbitration Award, App. A, at 11 (Dec. 19, 1997) (hereinafter "Mega-Arbitration Award").

[87] MCI Worldcom Comments at 49 citing Mega-Arbitration Award, App. A, at 11.

[88] Mega-Arbitration Award, App. A, at 11.

Thus, for instance, the additive to be paid by SWBT to a CLEC is $0.024 per minute of use for toll-free calls made by a CLEC customer from a metro exchange to a SWBT two-way optional EAS customer in an exchange contiguous to that metro exchange. For toll free calls made by a CLEC customer to a SWBT optional two-way EAS customer in contiguous exchanges other than those contiguous to a metro exchange, the additive is $0.0355 per minute of use.[89]

III. CONCLUSION

For the reasons set forth in our Evaluation and this Reply, the Texas Commission concludes that SWBT complies with the requirements of the FTA Section 271, and its application for interLATA authority should be granted.

[89] *Id.*; T2A, Attach. 12, Compensation, Sec. 5.3.

EXHIBIT 1

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of	§	
	§	
Application of SBC Communications Inc.,	§	
Southwestern Bell Telephone Company,	§	
And Southwestern Bell Communications	§	CC Docket No. 00-4
Services, Inc. d/b/a Southwestern Bell Long	§	
Distance for Provision of In-Region	§	
InterLATA Services in Texas	§	

AFFIDAVIT OF NARA V. SRINIVASA
ON BEHALF OF
THE PUBLIC UTILITY COMMISSION OF TEXAS

February 21, 2000

REDACTED--FOR PUBLIC INSPECTION

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Affidavit of Nara V. Srinivasa
On Behalf of
The Public Utility Commission of Texas

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

I, Nara V. Srinivasa, being of lawful age and duly sworn upon my oath, do hereby depose and state as follows:

1. My name is Nara V. Srinivasa. I am over 18 years of age, am of sound mind, and fully competent to give this affidavit.

I. Professional Experience and Educational Background

2. I have been employed by the Public Utility Commission of Texas (Texas Commission) since June 1990. My business address is 1701 N. Congress Avenue, Austin, Texas 78711-3326. I am currently Director of the Network Analysis Section, Telecommunications Industry Analysis Division of the Texas Commission. My job duties include analysis of telecommunications issues related to performance measures, wholesale and retail rates, collocation, depreciation, infrastructure, and service quality. My work experience at the Texas Commission includes: analysis of unbundled network element (UNE) cost-related issues, analysis of LRIC, TELRIC, and USF cost models, development of performance measurements and performance remedy plans, analysis of collocation issues, retail telephone service quality evaluation and monitoring, utility plant depreciation analysis, tariff analysis as related to new technology, telecommunications infrastructure monitoring, analysis of certification issues, sale, transfer, and merger applications evaluation, participation in Commission rulemaking activities. Prior to joining the Texas Commission, my work experience included telecommunications systems (Voice/Data/Video) design, and construction management.

3. I have over 25 years of cumulative experience in the field of telecommunications including regulation, management and engineering. I have been the chief technical expert in the 271 proceeding before the Texas Commission (Project No. 16251). I participated in all aspects of the proceeding, including the hearing, collaborative process and negotiations with SWBT and

the CLECs. I provided recommendations to the Texas Commissioners on numerous technical issues including SWBT's wholesale performance measurement related issues. I am one of the lead staff members involved in resolving disputes and monitoring SWBT's performance measurement related activities.

4. I have a Bachelor's Degree in Electrical Engineering (1971) (University Of Mysore), and I continued post graduate studies in Business Administration (1972-73) (University of Florida). I am a Licensed Professional Engineer in the State of Texas and a member of the IEEE Communications Society.

II. Scope of xDSL loop performance data analysis

5. The purpose of my affidavit is to respond directly to specific comments filed in this proceeding relating to SWBT's performance for xDSL loops. I reviewed and analyzed: (1) reconciled data provided in November 1999 by DIECA Communications, Inc. d/b/a Covad Communications Company (Covad), NorthPoint Communications, Inc. (NorthPoint), Rhythms Links, Inc. (Rhythms), and SWBT; (2) SWBT's reported performance data on xDSL, DS-1 and BRI loops; (3) data filed by SWBT before this Commission in *Ex Parte* submissions; and (4) CLEC-specific and aggregate data requested by Texas Commission staff from and provided by SWBT.

6. Some commenters state that the CLEC-specific performance data reported by SWBT does not match their internal analysis for several performance measures and, in addition, that the performance measurements themselves do not capture actual commercial experience. Furthermore, commenters state that SWBT's performance reports show SWBT is not providing nondiscriminatory access to xDSL loops. The performance measurement related issues raised by the commenters will be discussed in detail below.

7. Commenters claimed that the reported data for the months of October, November, and December show that SWBT habitually delivers Firm Order Confirmations (FOCs) and loops late and that SWBT's performance has deteriorated as orders have increased. In addition, commenters stated that SWBT's performance on other aspects of pre-ordering, ordering, provisioning, and maintenance and repair did not meet Section 271 standards. In response to commenters specific claims, I provide the following information related to SWBT's xDSL and BRI loop performance, including performance on FOC returns and loop make-up response times.

8. The Texas Commission's Evaluation filed on January 31, 2000, did not include all the details concerning the performance data reconciliation undertaken in November and December 1999. Therefore, I will elaborate in this affidavit. I examined the confidential performance data as submitted by Covad, NorthPoint, Rhythms and SWBT in November 1999 as a part of the data reconciliation process. A detailed analysis and discussions with all parties revealed that the processes of obtaining loop make-up data and ordering were not separate and distinct, but rather a "one-step" process. As a result, the performance data collection did not clearly distinguish the start and stop times for pre-order loop make-up requests and for the ordering and provisioning of loops. In addition, the process of specifying a PSD mask prior to loop qualification caused orders to be rejected and led to use of numerous supplemental orders. As detailed in the Texas Commission's Evaluation and Reply Evaluation, the loop make-up and ordering processes were therefore modified. However, as discussed below, the performance measurement (PM) data as reported by SWBT for the months of September, October, November, and December does not reflect the process changes.

9. Performance data applicable to two key measures, PM-55.1 and PM-57, was analyzed during the reconciliation process with SWBT, Covad, NorthPoint, and Rhythms. However, there are other PMs that capture performance related to provisioning, maintenance and repair activities for unbundled xDSL loops. The PMs were established by the Texas Commission during the collaborative process with inputs from participating CLECs. Telcordia validated SWBT's data collection processes for some of these measures. I provide an analysis of SWBT's performance under these PMs below.

10. In direct response to issues raised by commenters, the Texas Commission requested additional information from SWBT relating to FOC performance for November and December, for which I provide an analysis below.

III. Analysis of manual FOC return activity for xDSL loops

11. My review confirms that the FOC data as related to DSL loops was not included in SWBT's PM-5 reports, although the business rule, did not exclude or disaggregate performance reporting for DSL specific loops. However, because of the "one-step" process that was in place at the time the performance data was collected, the actual time for FOC return activity could not be identified.

12. In November 1999, after completing the reconciliation of performance data, Covad, NorthPoint, Rhythms, SWBT submitted for Texas Commission review stipulated documents containing reconciled data on a number of xDSL pre-ordering and ordering requests. I conducted an independent evaluation of the stipulated data.

A. Analysis of reconciled manual FOC return data for Covad

13. I conducted an independent evaluation of the stipulated data jointly filed by SWBT and Covad. I found that Covad disagreed with SWBT on some of the receipt dates for the FOC/Reject return. In order to verify the fax date for manual FOC/Reject return (which determines the end time for FOC/Reject under the business rules), I obtained from SWBT copies of faxed cover sheets for FOCs and rejects sent to Covad by SWBT on the orders where the parties disagreed on the notification date. On some of the PONs or orders Covad did not agree with SWBT as to the date on which the LSRs were sent. Some of the LSRs that were rejected and resubmitted did not clearly identify the date of resubmission.

14. As part of the evaluation, I assumed that the rejected orders were supplemented on the same day as the reject because the reconciled data did not include the date of the supplement. This assumption works in favor of Covad because in actuality Covad may not have sent a supplemental order on the same day as it's stated date for receipt of rejects. For example, if Covad did not supplement its order until 1 or 2 days later, this would result in a greater than actual FOC return time. However, this assumption could not be applied for November because the data was incomplete.

The start time for the FOC is the date appearing on the LSR, if the order went through without rejection due to loop qualification; however, if the order was rejected due to CLEC caused error, the start time for FOC would be the date the LSR was supplemented with corrections. The end time is the time stamp date on the fax if the process is manual, and the time stamp at the gateway if the process is electronic. The jointly filed data captured the performance for manual FOC, loop qualification, and reject activity.

Covad agreed as to the reconciled data that if a loop order was rejected based on a loop qualification which required the speed requested by the end user to be downgraded to a slower speed, the elapsed time for customer notification and response should not be included in SWBT's response time for an LSR submitted by Covad. Covad also agreed that if its response to

a SWBT reject exceeded three business days, the timelines associated with the orders should be excluded from the reconciled data.

I found that the reconciled data for Covad shows that the one step process of ordering, loop qualifications and loop make up requests did not clearly capture the performance as related to manual FOC returns as one would expect under the Texas Commission approved two step process. The data in Table-1 below, indicates that 100% and 84.8% of FOCs were returned within one day in September and October respectively. The average days for the return were 0.44 and 1.11 days. Also, I note that Covad may not be excluding the weekends and holidays in its internal analysis. This would be a plausible explanation for why Covad's internal analysis results in a longer FOC return time. For example, in some instances when a fax was sent on a Friday, Covad's analysis of the same order showed a receipt date of the following Monday. The reconciled data as filed for November was incomplete and did not clearly indicate when exactly the orders were supplemented after rejection due to Covad's error or due to SWBT's loop qualification process, so I did not conduct a further analysis of the November data.

Table 1: Reconciled Covad FOC Return Data for Sept. and Oct.

# OF LSRS/SUPPS	XXX	XXX
Percent </= 1 day	**100%**	**84.8%**
Average Days for FOC	**0.44**	**1.11**

I also conducted an independent evaluation of additional information requested by the Texas Commission from SWBT relating to FOC performance for November and December 1999. The performance data shown below as provided by SWBT indicates that 65% of manual FOCs were returned after the successful loop qualification process with an average response time of 1.57 days and 2.46 days in November. In December, 55% of the FOCs were returned within 1 day, with an average interval of 2.24 days, and the average response time to manually return FOC and loop make-up data was 2.78 days.

Table 2: Covad Manual FOC Return Data for Nov. and Dec.

	# LSRs/ Supps	Days	Avg. Days	% within 1 Day	# LSRs/ Supps	Days	Avg. Days	% within 1 Day
Rejects due to CLEC error	XXX	271	1.23	81%	XXX	579	1.89	58%
SWBT Reason Reject due to Loop	XXX	263	2.83	26%	XXX	556	3.76	22%
FOC after Lop Qual and supplement	XXX	129	1.57	65%	XXX	437	2.24	55%
FOC & Loop Make-Up data Together	XXX	202	2.46		XXX	383	2.78	

B. Analysis of reconciled manual FOC return data for NorthPoint

The NorthPoint/SWBT reconciled data contained only October performance data. I found that the one-step process NorthPoint was using for ordering loops and obtaining loop make-up data did not provide performance data to clearly distinguish pre-order loop make up response time from FOC. Also, I note that SWBT's loop qualification process and the requirement that the CLECs must fill in the PSD mask information caused numerous order rejections.

Table 3: Reconciled NorthPoint FOC Return Data for Oct.

#LSRs/Supps.	XXX	XXX	XXX	XXX
# within 1 day	27	24	13	3
Total # of Days	19	55	15	94
% within 1 Day	100%	70.6%	81.3%	13.6%
Average Days	0.70	1.62	0.94	4.27

To have an accurate performance picture and properly analyze the reconciled NorthPoint data for the month of October, it is necessary to separate the data into four distinct categories: rejects due to CLEC error (Type A); rejects due to SWBT's Loop Qualification Process (Type B); manual FOCs (Type C); and FOC sent with loop make-up data (Type D).

I found that for Type A performance, SWBT returned 100% of rejects within 1 day, and the average time was 0.7 days. For Type B, 70.6% of FOCs were returned within 1 day and the average time was 1.62 days. For Type C activity, where the manual FOCs were returned after the receipt of the corrected order or supplement, SWBT returned 81.3% within 1 day in October, and the average time for FOC return was 0.94 days.

For Type D activity, where the manual FOCs were sent contemporaneously with the loop-make up data, SWBT returned 13.6% within 1 day and the average time was 4.27 days. This category does not capture the FOC activity appropriately because the manual loop make-up activity is included in the process. Under the timeframes in place in October, SWBT's performance for returning loop make-up information was measured under a 3-5 day benchmark. Therefore, an average of 4.27 days to return *both* loop make-up data and consequently the FOC is reasonable and meets the benchmark.

The January data should capture manual FOC return performance that reflects the new process changes. After the implementation of the Texas Commission approved process changes, time for Type D activity need not be captured as part of the FOC. The performance for the loop make-up activity should be reflected in PM-57, the average response time for loop make-up data.

I also conducted an independent evaluation of additional information requested by the Texas Commission from SWBT relating to FOC performance for November and December 1999. The non-reconciled data contained in the table below shows that the average time for return of FOCs during the months of November and December, which includes loop qualification, was at 2.23 and 4.56 days respectively. The time frames are within the 3-5 day benchmark in effect at the time for returning loop make-up information. Therefore, these average times to return *both* loop make-up data and the FOC are reasonable.

Table 4: Nov. and Dec. Aggregate FOC Return Data

	# LSRs/ Supps.	Days	Avg. Days	% within 1 Day	# LSRs/ Supps.	Days	Avg. Days*	% within 1 Day
Rejects due to CLEC error	256	530	2.07	54%	206	645	3.13	40%
SWBT Reason Reject due to Loop	33	84	2.55	42%	35	194	5.54	20%
FOC after Loop Qual Process OK	145	324	2.23	50%	211	963	4.56	36%

C. Analysis of reconciled Manual FOC Return data for Rhythms

I analyzed the reconciled data for Rhythms and found that it contained performance related to four distinct types of activities similar to NorthPoint: rejection of LSRs due to CLEC error (Type A); rejection of LSRs due to SWBT's loop qualification process (Type B); return of FOC with due date information on accurate LSRs or supplements (Type C); and return of loop qualification or loop make-up data along with the FOC (Type D). Again, under the one-step ordering process, loop make-up requests and loop qualification processes are incorporated into the ordering process and the relevant FOC data as required by PM-5 could not readily be captured. The data under Type C activity is the data that comes closest to PM-5 performance activity, but is not exactly comparable if loop qualification process time is included.

Table 5: Reconciled Rhythms FOC Return Data for Aug. Through Oct.

	Aug.				Sept.				Oct.			
#LSRs/Supps	XXX	XXX	N/A	N/A	XXX	XXX	XXX	N/A	XXX	XXX	XXX	XXX
Total # of Days	0	14	N/A	N/A	10	4	3	N/A	47	14	4	6
% w/in 1 Day	100%	85.7%	N/A	N/A	40%	66.7%	100%	N/A	84%	50%	50%	N/A
Average Days	0	2	N/A	N/A	2	0.66	1	N/A	0.94	1.75	2	3

The summary of reconciled data shown in the table above is for the months of August through October 1999 for Rhythms. Although Rhythms had excluded weekends in its analysis of the jointly filed data, there were a few instances where it had not. Significant activity in terms of number of transactions occurred only during the month of October. The October data shows that 84% of rejects occurred under Type A activity, and the average time for reject notices was 0.94 days. For Type B activity 50% were rejected within 1 day, however, the average time was 1.75 days. For FOC return time under Type C, which included the defunct loop qualification process, 50% of the rejects occurred within 1 day, and the average response time was 2 days. There were less than 10 data points for Type C and Type D activity. The average time for return of FOC with loop make-up data was 3 days.

An examination of the November and December data shown in the table below as provided by SWBT at the Texas Commission's request indicates that SWBT returned the FOCs

67% and 79% of the time within 1 day for manual returns in November and December. However, the average FOC return time for Type C activity during the same months was 1.33 and 0.96 days.

Also of interest in this data is that the average response time for the loop make-up data averaged from 3.5 to 2.75 days which is well below the 3-5 day benchmark that was in effect at the time.

Table 6: Reconciled Rhythms FOC Return Data for Nov. and Dec.

	Nov.				Dec.			
#LSRs/Supps	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Total # of Days	78	46	28	7	63	90	23	11
% within 1 Day	93%	43%	67%	N/A	64%	26%	79%	N/A
Average Days	0.93	2.19	1.33	3.5	1.43	3.91	0.96	2.75

IV. Analysis of Average Response Time for Loop Make-up Information

In accordance with its December 16th commitments to the Texas Commission, in January SWBT began tracking PM-57, *Average Response Time for Loop Make-up Information*, with the start time beginning when a request is received from the CLEC by the LSC and time ending when the loop qualification has been transmitted back to the CLEC. As the data below for the month of January demonstrates, SWBT is providing better than parity performance on a statewide basis. Also, the geographically disaggregated data for January demonstrates that SWBT is providing better than parity performance in the Dallas/Ft. Worth (DFW) and Houston areas where the combined CLEC requests accounted for 85% of the total on a statewide basis (922 requests).

Table 7: January Avg. Response Time for Loop Make-up Information

CWT	129	5.47	5.38	0.34
DFW	414	3.84	4.36	-2.63
Houston	372	3.38	8.55	-23.86
ST	7	6.71	1.75	Base < 10
Texas Statewide	922	3.90	6.53	-17.50

V. Analysis of Performance Related to xDSL Loop Provisioning

The following PMs capture the performance related to provisioning of DSL loops: PM-55.1, which captures the average installation interval for DSL Loops; PM-58, which captures the percent SWBT missed due dates for DSL loops; and PM-60, which captures the percent missed due dates due to lack of facilities. Under the approved PM Business Rules (Version 1.6), the standard for parity comparison under PM-58 for xDSL performance is DS-1 loop performance. However, SWBT's reported data has compared the performance delivered to CLECs to its retail xDSL offering, which is predominantly ADSL.

For purposes of determining nondiscriminatory performance, I include for all PMs related to provisioning a performance data analysis using as a parity measure both DS-1 loops and SWBT's retail DSL. Because SWBT did not use the DS-1 loops as a comparison, the Texas Commission requested this specific data from SWBT in order for me to complete an analysis.

A. PM-55.1, *Average Installation Interval: DSL*

The statewide aggregate data for CLECs for PM-55.1 shows that, for non-conditioned loops, SWBT delivered parity performance during the months of October through December. For conditioned loops, SWBT delivered better than parity or parity performance in September and December, and missed the performance in October and November. In December the performance improved while the CLEC order volume increased by 104%.

Table 8: PM-55.1, *Avg. Installation Interval DSL Loops Non-conditioned* (Statewide CLEC aggregate)

CLEC Perf	9.5	6.76	6.84	7.22
SWBT Perf	7.76	5.80	6.52	6.77
# CLEC Orders	4	21	218	273
Z- value	Base <10	0.88	0.86	1.28

Table 9: PM-55.1, *Avg. Installation Interval DSL Loops Conditioned* (Statewide CLEC aggregate)

CLEC Perf	9.50	16.42	19.30	14.23
SWBT Perf	12.00	9.50	11.50	11.50
# CLEC Orders	10	19	23	47
Z- value	-1.25	4.14	7.06	1.08

1. NorthPoint Performance Under PM-55.1

The PM-55.1 data, in the table below, for NorthPoint shows that SWBT provided better than parity performance in November and parity performance in December, while NorthPoint's order volume increased by nearly 40% in December for non-conditioned loops. For conditioned